

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 11-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 11-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thukral (US Patent Publication No. 2006/0195866), in view of Blasko et al. (US Patent Publication No. 2002/0083444) in view of Sgarglino (US Patent Publication No. 2003/0229893) in view of Drake (US Patent Publication No. 2002/0078441) in view of Ogawa et al. (U.S 2002/0016972).**

Regarding claim 11, Thukral discloses a system (see fig. 1 television-based system 100) for delivering personalized and localized ad (is interpreted as targeted ads) content to multiple users each having an A/V display (see fig. 1 television-based client systems 104(1-N)) comprising: a plurality of Intelligent Control Modules (ICM) (see client device 110 (1&2)), each ICM being operationally coupled to an A/V display for displaying personalized and localized ad content during programming commercial breaks (see paragraph 0021-0023); and an Ad Center (see fig. 1 content provider 102) having multi-directional communications links (see fig. 1

network 106 which is an IP-based network and paragraphs 0024, 0040-0042) with said plurality of Intelligent Control Modules; at least one of said ICM and Ad Center being configured to analyze (is interpreted as determine) ads and user info and to select personalized and localized ad content (see paragraphs 0037-0039, 0045-0048) to select personalized and localized ad content for each ICM (see paragraphs 0025-0028, 0030-31); ad content, programming content (see paragraphs 0025) and one or more telecommunication sources (see network 106).

Thukral does not discloses users personal and local attributes, a repository unit for storing user information and ad agency or advertiser information, transmit user's personal and local attributes, user's user ad search and follow-up requests, and software and firmware updates; wherein users can follow-up and search for additional ad information.

In similar art, Ogawa discloses a repository unit for storing user information (see fig. 1 & 4 user profile database 6 and paragraphs 0096, 0102) and ad agency or advertiser information (see fig. 4 advertisement attribute database 203 and printer driver database 7 and paragraphs 0067, 0072, 0052-0054), a user's personal and local attributes (see fig. 1 & 4 user profile database 6 and paragraphs 0096, 0102) and transmit user's personal and local attributes (see paragraph 0067- 0069).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral's system with the teaching of a repository unit for storing user information and ad agency or advertiser information, a user's personal and local attributes, and transmit user's personal and local attributes, as taught by Ogawa, in order to deliver targeted advertisements to individual users.

Thukral in view of Ogawa does not disclose analyzing ad agencies and advertisers; user ad search and follow-up requests, and software and firmware updates; wherein users can follow-up and search for additional ad information.

In similar art, Blasko discloses analyzing ad agencies and advertisers (see paragraphs 0016, 0028-0031, 0039, 0044, 0051).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral in view of Ogawa 's system with the teaching of analyzing ad agencies and advertisers, as taught by Blasko, in order to generate a place for a targeted ad as a result of a correlation steps.

Thukral in view of Ogawa in view of Blasko does not disclose user ad search and follow-up requests, and software and firmware updates; wherein users can follow-up and search for additional ad information.

In similar art, Sgaraglino discloses user ad search and follow-up requests and wherein users can follow-up and search for additional ad information (see fig. 5 and paragraphs 0018-0019, 0046, 0094, 0100, and 0104).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral in view of Ogawa in view of Blasko 's system with the teaching of user ad search and follow-up requests and wherein users can follow-up and search for additional ad information through one or more telecommunication sources connected to their ICM, as taught by Sgaraglino, in order to provide an interactive advertising.

Thukral in view of Ogawa in view of Sgarglino does not disclose software and firmware updates.

In similar art, Drake discloses software updates (see paragraphs 0028-0029).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral in view of Ogawa in view of Blasko in view of Sgaraglino's system with the teaching of software updates, as taught by Drake, in order to update the interactive software in the system.

Regarding claim 12, Thukral in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake discloses the limitation as discussed in the rejection of claim 11.

Thukral does not discloses wherein the Ad center further comprises: a receiving unit configured to receive at least one of TV channels, programs, and ad content from at least one of satellite TV providers, cable TV providers, TV stations, terrestrial TV providers, Internet TV providers, and IPTV; a repository unit configured to store advertiser information, ad agency information, ad information and user information; an ad database configured to store at least one of ads, expired ad information and ad follow-up information; an ad output decision making unit configured to perform data processing and decision making based on ad attributes and user attributes associated with each ICM; an ad input/output unit configured to handle communication with at least one of the ICM and external sources, said communication including distribution of ad sets and/or ad schedules to the intelligent control modules upon generation of user directed ad sets and/or user personalized and localized ad schedules by the ad output decision making unit, user information from the repository unit to intelligent control modules, receipt of user requests, transmission of upload information on user viewing patterns and/or ad preferences from intelligent control modules; and an ad control unit configured to control and

monitor all components of said ad center and to process and dispatch information for, and request and control software updates for the ICM.

In similar art, Ogawa discloses a receiving unit (see fig. 4 content collector 48) configured to receive at least one of TV channels, programs, and ad content (see paragraph 0066) from at least one of satellite TV providers, cable TV providers, TV stations, terrestrial TV providers, Internet TV providers, and IPTV (see paragraphs 0049, 0054-0055); a repository unit (see fig. 4 Database 203 &6) configured to store advertiser information, ad agency information, ad information and user information (see paragraphs 0096, 0102); an ad database (see fig. 4 Database 50) configured to store at least one of ads (see paragraph 0067-0068), expired ad information and ad follow-up information; an ad output decision making unit (see fig. 4 Distribution Manager 60) configured to perform data processing and decision making based on ad attributes and user attributes (see paragraphs 0068-0073) associated with each ICM; an ad input/output unit (see fig. 4, Application server 57) configured to handle communication with at least one of the ICM and external sources (see paragraphs 0065-0066), said communication including distribution of ad sets and/or ad schedules to the intelligent control modules upon generation of user directed ad sets and/or user personalized and localized ad schedules by the ad output decision making unit (see paragraph 0073), user information from the repository unit to intelligent control modules, receipt of user requests, transmission of upload information on user viewing patterns and/or ad preferences from intelligent control modules (see paragraph 0065); and an ad control unit (see fig. 4 Distribution engine 54) configured to control and monitor all components of said ad center and to process and dispatch information for (see paragraph 0068-0070).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral's system with the teaching of a repository a receiving unit; a repository unit; an ad database; an ad output decision making unit an ad input/output unit; and an ad control unit, as taught by Ogawa, in order for the ad center to perform the main control of the delivering of targeted advertisements information to individual users.

Thukral in view of Ogawa in view of Sgarglino does not disclose software and firmware updates.

In similar art, Drake discloses software updates (see paragraphs 0028-0029).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral in view of Ogawa in view of Blasko in view of Sgarglino's system with the teaching of software updates, as taught by Drake, in order to update the interactive software in the system.

Regarding claim 13, Thukral (see paragraph 0035) in view of Ogawa in view of Blasko in view of Sgarglino in view of Drake discloses wherein the user information includes at least one of access card information, localization information, user attributes and user viewing patterns and ad preferences collected by the Intelligent Control Modules.

Regarding claim 14, Thukral (see paragraph 0043) in view of Ogawa in view of Blasko in view of Sgarglino in view of Drake further discloses wherein the ad center comprises at least one of a terrestrial TV service provider, a cable TV provider, a satellite TV provider, an internet TV service provider, an Internet Protocol (IP) TV service provider, an independent content service provider, a provider affiliated with said aforementioned service providers, and an

independent personalized and localized ad service provider with interfaces to said aforementioned service providers.

Regarding claim 15, Thukral (see fig. 4 acquisition server 412) in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake further discloses wherein the ICM comprises an independent module integrated with at least one of a TV; a TV set top box, the A/V display, and a computer.

Regarding claim 16, Thukral (see fig. 4 acquisition server 412) in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake further discloses wherein the ICM comprises an autonomous device residing separate from at least one of a TV; a TV set top box, the A/V display and a computer.

Regarding claim 17, Thukral in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake further discloses wherein the ICM further comprises: an ad decision support unit (is interpreted as processor 912) configured to determine user personalized and localized ad schedules pertaining to channels and time, to collect user viewing patterns based on intelligent programs and event triggering mechanisms, wherein expert business rules and mathematical and statistic models are established on user and ad attributes information, including viewing patterns and user ad preferences (see Thukral paragraphs 0082, 0084-0085); an ad repository unit (is interpreted as input unit 902) configured to store personalizable and localizable ads and non-personalizable and non-localizable ads, which are updated in real-time by the ad center and removed in real-time based on their expiration attributes (see Thukral paragraph 0080) ; an ICM control unit (is interpreted as processor 912) configured to control and monitor all components in the ICM and to detect TV commercial times for showing of personalized and localized ads based

on ad schedule generated by the ad decision support unit through a pre-configured ad channel or the current program channel (see Thukral paragraph 0083); a user information unit (is interpreted as monitored information 200) configured to store user attribute information, which is updated through the repository unit, and to store user viewing patterns collected by the ad decision support unit and ad preferences set up by the user (see Thukral paragraph 0033); an ad follow-up unit (see Sgaraglino fig. 5 server 580) configured to follow up ads for additional or more detailed video and/or data information in real-time or at a later time; an ad preference setup unit (see Thukral paragraphs 0018- 0019) configured to help users setup their ad preferences for a certain period of time, which are used by the ad decision support unit to generate the appropriate personalized and localized ad schedule, wherein ad preferences are based on ad classifications implied by ad attributes, shopping plans for a certain period; an ad search unit (see Sgaraglino paragraphs 0035-0036) configured to search and browse ads with ad attributes and keywords; an input/output unit (is interpreted as audio/video input/output 926) configured to transmit input and output information with interfaces including at least one of the ad center, TV service providers, A/V displays, TV and internet (see Thukral paragraphs 0086); and a remote control unit (see Thukral remote control 908) configured to be used by users to control functions supported by the intelligent control module.

Regarding claim 18, Thukral disclose a method for delivering personalized and localized ad content to multiple users each having an A/V display(see paragraphs 0071-0073), comprising the steps of: providing a plurality of Intelligent Control Modules (ICM) (see paragraph 0076 one or more client devices 110(1-N)), each ICM displaying personalized and localized ad content during programming commercial breaks on an A/V display(see paragraph 0021-0023);

establishing a multi-directional communications link (see fig. 1 network 106 which is an IP-based network and paragraphs 0024, 0040-0042) between said plurality of ICM's and an Ad Center (see fig. 1 content provider 102) for transmission of ad content, and/or programming content, to each ICM with said Ad Center; analyzing ads, and user info and selecting personalized and localized ad content(see paragraphs 0025) for each ICM(see paragraphs 0037-0039, 0045-0048); and connecting one or more telecommunication sources (see network 106)to each ICM.

Thukral does not discloses users personal and local attributes, a repository unit for storing user information and ad agency or advertiser information, transmit user's personal and local attributes, user's user ad search and follow-up requests, and software and firmware updates; wherein users can follow-up and search for additional ad information.

In similar art, Ogawa discloses a repository unit for storing user information (see fig. 1 & 4 user profile db 6 and paragraphs 0096, 0102) and ad agency or advertiser information (see fig. 4 advertisement attribute database 203 and printer driver db 7 and paragraphs 0067, 0072, 0052-0054), a user's personal and local attributes (see fig. 1 & 4 user profile db 6 and paragraphs 0096, 0102) and transmit user's personal and local attributes (see paragraph 0067- 0069).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral's system with the teaching of a repository unit for storing user information and ad agency or advertiser information, a user's personal and local attributes, and transmit user's personal and local attributes, as taught by Ogawa, in order to deliver targeted advertisements to individual users.

Thukral in view of Ogawa does not disclose analyzing ad agencies and advertisers; user ad search and follow-up requests, and software and firmware updates; wherein users can follow-up and search for additional ad information.

In similar art, Blasko discloses analyzing ad agencies and advertisers (see paragraphs 0016, 0028-0031, 0039, 0044, 0051).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral in view of Ogawa's system with the teaching of analyzing ad agencies and advertisers, as taught by Blasko, in order to generate a place for a targeted ad as a result of a correlation steps.

Thukral in view of Ogawa in view of Blasko does not disclose user ad search and follow-up requests, and software and firmware updates; wherein users can follow-up and search for additional ad information.

In similar art, Sgaraglino discloses user ad search and follow-up requests and wherein users can follow-up and search for additional ad information (see fig. 5 and paragraphs 0018-0019, 0046, 0094, 0100, and 0104).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral in view of Ogawa in view of Blasko's system with the teaching of user ad search and follow-up requests and wherein users can follow-up and search for additional ad information through one or more telecommunication sources connected to their ICM, as taught by Sgaraglino, in order to provide an interactive advertising.

Thukral in view of Ogawa in view of Sgaraglino does not disclose software and firmware updates.

In similar art, Drake discloses software updates (see paragraphs 0028-0029).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral in view of Ogawa in view of Blasko in view of Sgaraglino's system with the teaching of software updates, as taught by Drake, in order to update the interactive software in the system.

Regarding claim 19, Thukral in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake discloses the limitation as discussed in the rejection of claim 18.

Thukral does not disclose wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a first path, said first path comprising the steps of: determining if an ad repository in the ICMs includes additional video and/or data information for a user-interested ad; performing at least one of an ad follow-up and search directly against the Ad Repository within the Intelligent Control Modules; and displaying follow-up details to the users about the user-interested ad via the A/V Display.

Sgaraglino (see fig. 5 and paragraphs 0018-0019, 0046, 0094, 0100, and 0104) discloses wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a first path, said first path comprising the steps of: determining if an ad repository in the ICMs includes additional video and/or data information for a user-interested ad; performing at least one of an ad follow-up and search directly against the Ad Repository within the Intelligent Control Modules; and displaying follow-up details to the users about the user-interested ad via the A/V Display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral's method with the teaching of wherein the step of

selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a first path, said first path comprising the steps of: determining if an ad repository in the ICMs includes additional video and/or data information for a user-interested ad; performing at least one of an ad follow-up and search directly against the Ad Repository within the Intelligent Control Modules; and displaying follow-up details to the users about the user-interested ad via the A/V Display, as taught by Sgaraglino, in order to provide an interactive advertising.

Regarding claim 20, Thukral in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake discloses the limitation as discussed in the rejection of claim 18.

Thukral does not disclose wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a second path, said second path comprising the steps of: sending at least one of the ad follow-up and ad search requests through an ICM Input/Output Unit in at least one of the ICMs to the Ad Center; conducting at least one of an ad follow-up and ad search in an Ad Database in the Ad Center; and transmitting matching results back to the applicable Intelligent Control Module for viewing.

In similar art, Sgaraglino (see fig. 5 and paragraphs 0018-0019, 0046, 0094, 0100, and 0104) discloses wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a second path, said second path comprising the steps of: sending at least one of the ad follow-up and ad search requests through an ICM Input/Output Unit in at least one of the ICMs to the Ad Center; conducting at least one of an ad follow-up and ad search in an Ad Database in the Ad Center; and transmitting matching results back to the applicable Intelligent Control Module for viewing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral's method with the teaching of wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a second path, said second path comprising the steps of: sending at least one of the ad follow-up and ad search requests through an ICM Input/Output Unit in at least one of the ICMs to the Ad Center; conducting at least one of an ad follow-up and ad search in an Ad Database in the Ad Center; and transmitting matching results back to the applicable Intelligent Control Module for viewing, as taught by Sgaraglino, in order to provide an interactive advertising.

Regarding claim 21, Thukral in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake discloses the limitation as discussed in the rejection of claim 20.

Thukral does not disclose wherein the second path further comprises the steps of: searching the matching results for additional and online video and data information; and providing at least one of a follow-up ad and an internet website to the requesting user.

In similar art, Sgaraglino (see paragraphs 0035-0036, 0082) discloses wherein the second path further comprises the steps of: searching the matching results for additional and online video and data information; and providing at least one of a follow-up ad and an internet website to the requesting user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral's method with the teaching of searching the matching results for additional and online video and data information; and providing at least one of a

follow-up ad and an internet website to the requesting user, as taught by Sgaraglino, in order to provide an interactive advertising.

Regarding claim 22, Thukral in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake discloses the limitation as discussed in the rejection of claim 18.

Thukral does not disclose wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a third path, said third path comprising the step of: sending at least one of the ad follow-up and ad search requests via an internet connection port on the Intelligent Control Modules.

In similar art, Sgaraglino (see paragraphs 0035-0036, 0050, 0055-0058) discloses wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a third path, said third path comprising the step of: sending at least one of the ad follow-up and ad search requests via an internet connection port on the Intelligent Control Modules.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral's method with the teaching of wherein the step of selecting personalized and localized ad content further comprises performing the ad follow-up request and/or ad search via a third path, said third path comprising the step of: sending at least one of the ad follow-up and ad search requests via an internet connection port on the Intelligent Control Modules, as taught by Sgaraglino, in order to provide an interactive advertising.

Regarding claim 23, Thukral (see paragraphs 0029, 0038-0039) in view of Ogawa see in view of Blasko in view of Sgaraglino in view of Drake further discloses further comprising the steps of: providing an Ad Decision Support Unit in at least one ICM for generating a user

personalized and localized ad schedule; and providing an ICM control unit for playing recommended ads to the user based on the ad schedule, wherein triggering of intelligent programs within the Ad Decision Support Unit is event-based.

Regarding claim 24, Thukral in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake discloses the limitation as discussed in the rejection of claim 23.

Thukral does not disclose the steps of: performing personalization and localization processing by the Ad Decision Support Unit based on ad and user attributes; determining an applicable ad set for transmission to the user's Intelligent Control Modules; and determining ad schedules pertaining to a user if the user's viewing patterns and ad preferences are available, wherein the ad and user attributes are collected and processed by at least one of the Ad Decision Support Unit and an Ad Center Output Decision Support Unit for determining at least one of the user personalized and localized ad schedules and at least one applicable ad set.

In similar art, Ogawa (see paragraphs 0071-0073) disclose the steps of: performing personalization and localization processing by the Ad Decision Support Unit based on ad and user attributes; determining an applicable ad set for transmission to the user's Intelligent Control Modules; and determining ad schedules pertaining to a user if the user's viewing patterns and ad preferences are available, wherein the ad and user attributes are collected and processed by at least one of the Ad Decision Support Unit and an Ad Center Output Decision Support Unit for determining at least one of the user personalized and localized ad schedules and at least one applicable ad set.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Thukral's method with the teaching of the steps of: performing

personalization and localization processing by the Ad Decision Support Unit based on ad and user attributes; determining an applicable ad set for transmission to the user's Intelligent Control Modules; and determining ad schedules pertaining to a user if the user's viewing patterns and ad preferences are available, wherein the ad and user attributes are collected and processed by at least one of the Ad Decision Support Unit and an Ad Center Output Decision Support Unit for determining at least one of the user personalized and localized ad schedules and at least one applicable ad set, as taught by Ogawa, in order to distribute the content and advertisement received to respective users.

Regarding claim 25, Thukral (see Paragraphs 0021, 0024, 0029-0031, 0041) in view of Ogawa in view of Blasko in view of Sgaraglino in view of Drake further discloses steps of: the Ad Center and the Intelligent Control Modules communicating and exchanging information in real-time with an event-driven mechanism via the Ad Center Input/Output Unit and the ICM Input/Output Unit; determining at least one of user applicable and personalized and localized ad sets and ad schedules; and updating the Ad Center based on at least one of an addition, change or removal of an ad, user information or user attribute.

### *Conclusion*

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKLIL TESFAYE whose telephone number is (571)270-5685. The examiner can normally be reached on Monday to Thursday 8AM-5PM and Friday 8AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Y. Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. T./

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Examiner, Art Unit 2423

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